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THE SCHOOLHOUSE IN THE CITY.

EDUCATIONAL FACILITIES LABS. INC., NEW YORK, N.Y.

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THE CHANGING ROLE OF THE SCHOOLHOUSE REFLECTS THE CHANGING NATURE OF SOCIETY. NEW SOCIAL MOVEMENTS AND PLANNING CONCEPTS, SHIFTING POPULATION COMPOSITION, AND NEW EDUCATIONAL PROGRAMS DEFINE PROBLEMS TO BE RESOLVED BY THE URBAN SCHOOLHOUSE. THE ANSWERS LIE IN ITS TRANSFORMATION TO A COMMUNITY-ORIENTED CENTER THROUGH PRACTICAL MEANS. JOINT OCCUPANCY PROVIDES A FEASIBLE ECONOMIC SOLUTION TO THE PROBLEM OF HIGH CENTRAL CITY LAND COSTS. PROJECTS IN TWO CITIES SHOW INTEGRATION OF THE SCHOOLHOUSE INTO A MULTI-FUNCTION FACILITY. COST REDUCTIONS ALSO OCCUR IN THE USE OF PUBLIC AIR AND WATER RIGHTS, THE CONVERSION OF EXISTING BUILDINGS, AND THE REJUVENATION OF OUTMODED FACILITIES. MORE COMPREHENSIVE SOLUTIONS TO THE PROBLEM OF SCHOOL-COMMUNITY RELATIONSHIP ARE FOUND IN THE CENTRALIZATION PATTERN OF THE EDUCATION PARK, WHILE THE PROBLEM OF THE PERIPATETIC FAMILY PATTERN MAY DEPEND UPON INDUSTRY'S DEVELOPMENT OF A SUCCESSFUL DEMOUNTABLE CLASSROOM. (MH)

# The Schoolhouse in the City

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EDUCATIONAL FACILITIES LABORATORIES was established by the Ford Foundation in 1958 to help schools and colleges solve their physical problems by encouraging research, experimentation, and the dissemination of knowledge regarding educational facilities. In the beginning EFL's program was confined to education in the United States. In 1965 EFL's certificate of incorporation was expanded to include Canadian schools and colleges.

# The Schoolhouse in the City

The city schoolhouse has become one of the focal points in the battle to reverse urban decay in America. The traditional city schoolhouse has been ill-suited to its new and additional role of helping to resolve social, economic, and racial problems.

In too many city neighborhoods, the schoolhouse is aged, crumbling, ill-equipped, a symbol of the decay surrounding it. Too often, the city schoolhouse lacks the modern auxiliary facilities—libraries, auditoriums, cafeterias, gymnasiums—found in its newer, suburban counterparts. Almost never does it boast the facilities needed to serve the community at large.

A lag in school building during the depression years of the thirties, followed by building restrictions during World War II, held down new school building in the cities. The postwar population growth was primarily in the suburbs, and that is where the new schools went. Often when a new school was built downtown, educators and architects regarded it as a single-purpose institution, serving children and teachers only, and operating from 8 a.m. to 3 p.m., 5 days a week, 10 months a year. They frequently did not anticipate—indeed, some still do not—the transformation of the school into a community institution serving adults as well as children, performing social and cultural as well as educational functions, and operating nearly around the clock and across the calendar.

A dramatic example of the decline of urban schools can be found in Boston. A Harvard Graduate School of Education study in 1962 found that 40 per

cent of Boston schoolchildren were housed in buildings over 50 years old and one third of those were in schools more than 70 years old.

The City's last large-scale building program, which created the junior high school system, ended in 1931. Since then, depression, war, and a post-war squeeze on City finances have slowed Boston's school construction program to less than a crawl.

In fact, since World War II, Boston has been able to erect only 13 new schools, all since 1952. Of 63 old buildings recommended for abandonment in a 1953 report, only 32 were closed by the target date of 1960. Many of the rest still are in use, among them the Quincy School, a building that revolutionized school architecture when it was built in 1847. (Quincy was the first school in the nation to be designed as a fully graded school, in which pupils were divided by age into equal-sized groups of 55 and placed in almost identical classrooms, each with a single teacher. Its basic layout of rigid classrooms remains a prototype for many schools being built today.)

The Boston pattern—neglect—is duplicated to greater or lesser degree in cities across the country. Some have fared better than others politically and financially and have had greater success in replacing overaged buildings and reducing overcrowding. To illustrate:

Chicago, for example, performed the prodigious feat of building 281 new schools and additions between 1952 and 1965 and, in part through the use of portable classrooms, eliminated double sessions in 1962. Most of the rest of the nation's cities fall somewhere between Boston and Chicago in their school construction performance.

But, whatever their progress in building new schools, all of the cities have learned that it is not enough simply to build more classrooms and add more seating capacity.

Increasingly, society is asking that new schools be planned in such a way that they are integrated or, at the very least, so that segregation is substantially reduced. And, the new schoolhouses must be equipped with, or designed to accommodate, facilities for the community services they inevitably will be asked to provide.

No longer can new schools be located by spot-map, putting schools wherever the dots (children) are clustered. And the school, when it is built, cannot be designed solely as a place where teachers and children meet in standard classes—September to June—for a thousand hours a year.

The city school, wherever it is placed and whatever its size and facilities, is inextricably enmeshed in the sociology of the city. By its presence it either speeds the day when the city, in all its parts, becomes a good place for good

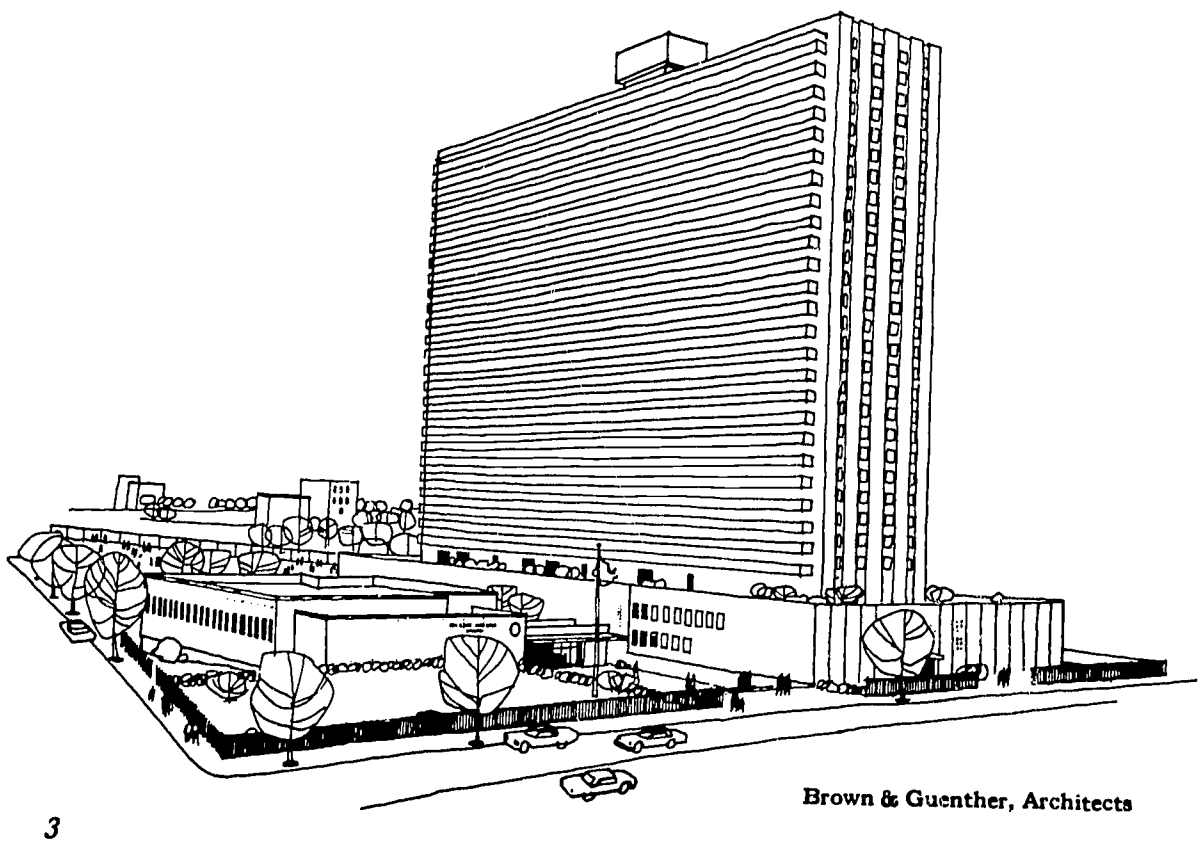
people to live, or it stands aside, a sullen fortress inviting some other kind of institution to take its place.

But, here and there, the cities' schools are responding. Not that any one city or any one kind of school has the final answer. Only that some schools, in some places, are probing and coming up with new ways of dealing with the new problems. Here are some of the inventions we see—and which, in several instances, EFL has been privileged to help:

### JOINT OCCUPANCY

Real estate costs are prohibitively high for school sites in the central city. Whether city school sites are acquired through direct purchases or condemnation, their costs tend to be many times those of suburban sites and their size smaller. In the past, city school districts simply had to face up to the costs, acquire school sites, and in highly uneconomic fashion, erect schools on them. But in recent years a number of alternatives have been developed.

One is the joint-occupancy concept, in which school facilities are built into private or public housing projects or even into commercial office buildings. In effect, such joint-occupancy schemes provide free sites for public schools. In the case of private schools, they even may result in rental incomes in



Brown & Guenther, Architects

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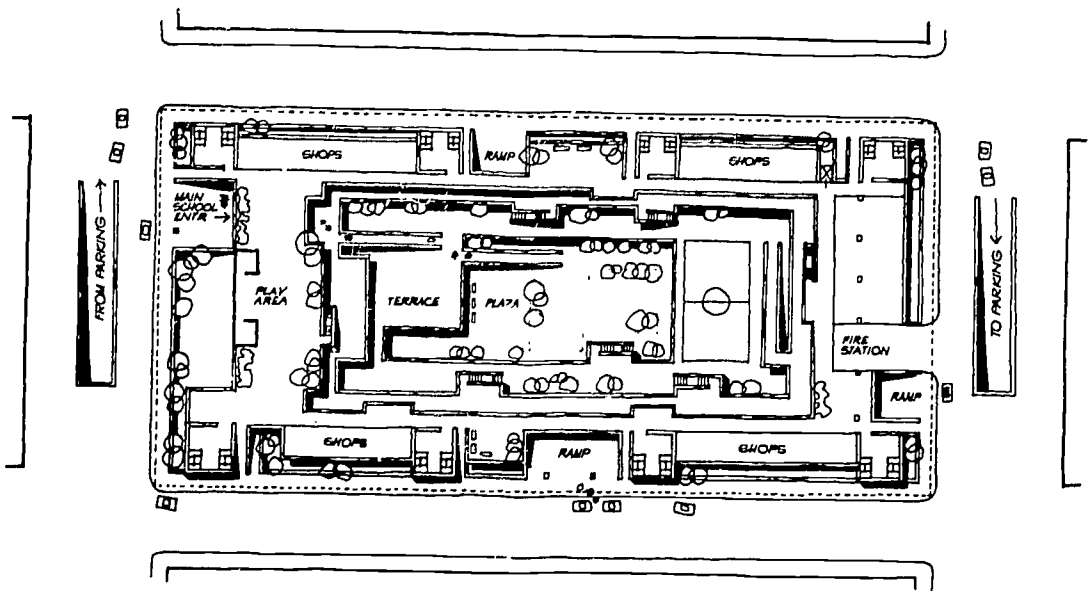


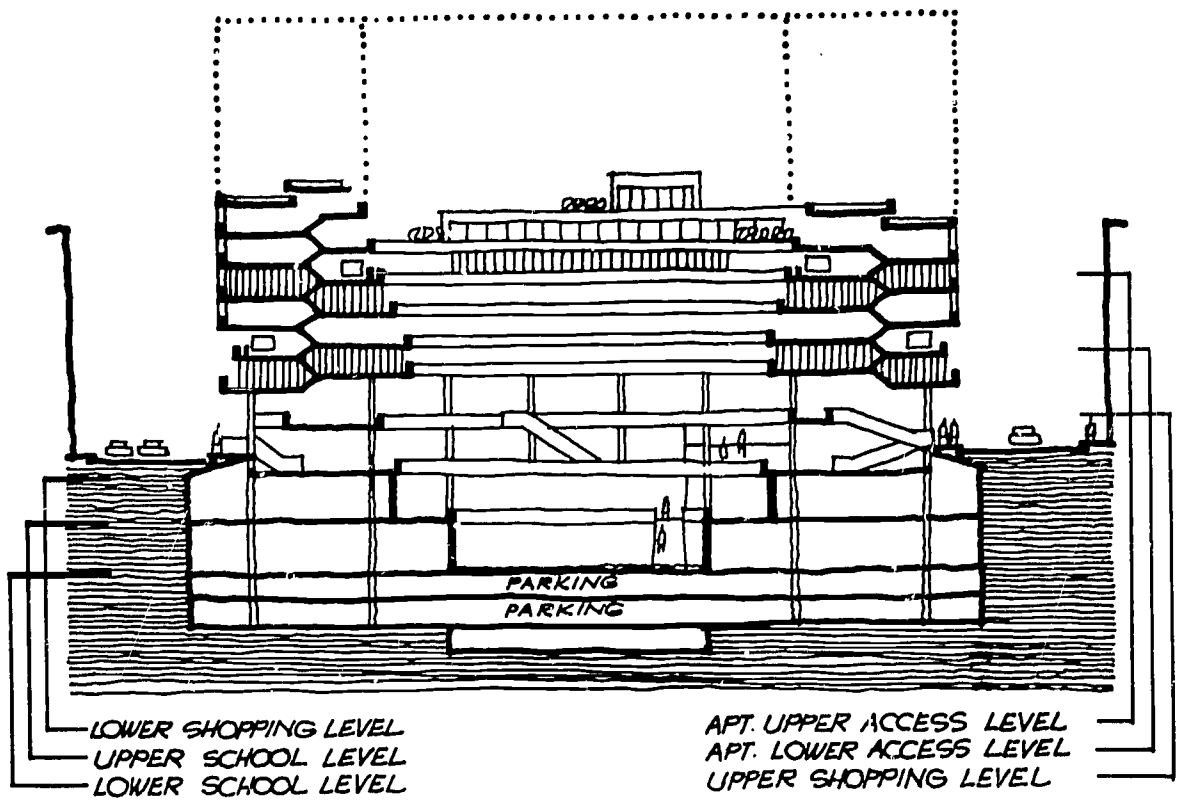

Toombs, Amisano & Wells, Architects & Engineers

excess of the costs of debt retirement and operating expenses. The surplus can be poured back into the educational program.

New York and Chicago both have created elementary school facilities in public housing projects by altering space originally designed as apartments. And New York is planning two projects, one in a middle-income housing development and the other in a private apartment complex. In both cases the lower floors of the apartment structures will be designed as school space and attached low-rise buildings will house auxiliary facilities such as auditoriums and cafeterias.

A third project, now in the proposal stage, creates a community atmosphere both within and without the structure. The school, on ground and subterranean levels, is topped by a level of commercial shops and four levels of apartments. Two levels of parking are beneath the underground recreational area. There is an interior court and playground. Other community services, such as medical and mental health clinics, are encompassed within the building. All facilities, including the auditorium, gymnasium, and swimming pool, will be available for public use after school hours.

Although New York has a public junior college operating in a high-rise office building, public school space has yet to be built into office buildings. But such a move has been under study in New York for some five years. Specifically, the plans call for construction of a commercial high school topped by a high-rise office building on the east side of the midtown commercial district.[1] It still has not been determined whether the school board



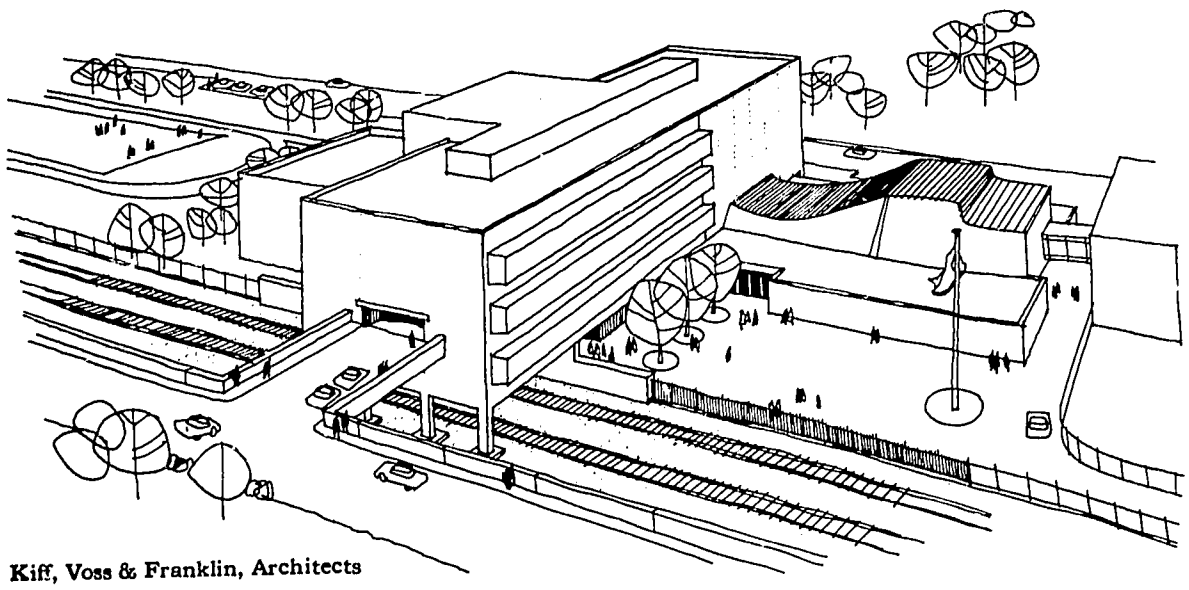

will hold title to the site and building or whether the building will be erected and owned by a private developer and the school space leased to the City.

Either way, the Board of Education stands to gain. If it owns the building, rental incomes will more than offset the loss of real estate taxes normally involved when a city takes over property. If a developer owns the building, the City will continue to collect taxes and expects to recover its share of the cost of the building in the first generation of the building's life.

Or, under newly enacted state legislation, the New York City Education Construction Fund has been created and is authorized to build schools, selling or leasing the air rights above them for apartment or office space. The resulting income would contribute to the cost of the schools.

In Chicago, school authorities have taken a different approach to joint occupancy. The 6-story classroom wing of the City's new Jones Commercial High School was designed to support a 15-story commercial tower. But erection of the tower will await conclusion of a suitable agreement for sale or rental of air rights over the school to a developer.

The joint-occupancy schemes have advantages other than helping to overcome high real estate costs. Space is freed for parks and playgrounds. Provision can be made for future fluctuations in the size and composition



Kiff, Voss & Franklin, Architects

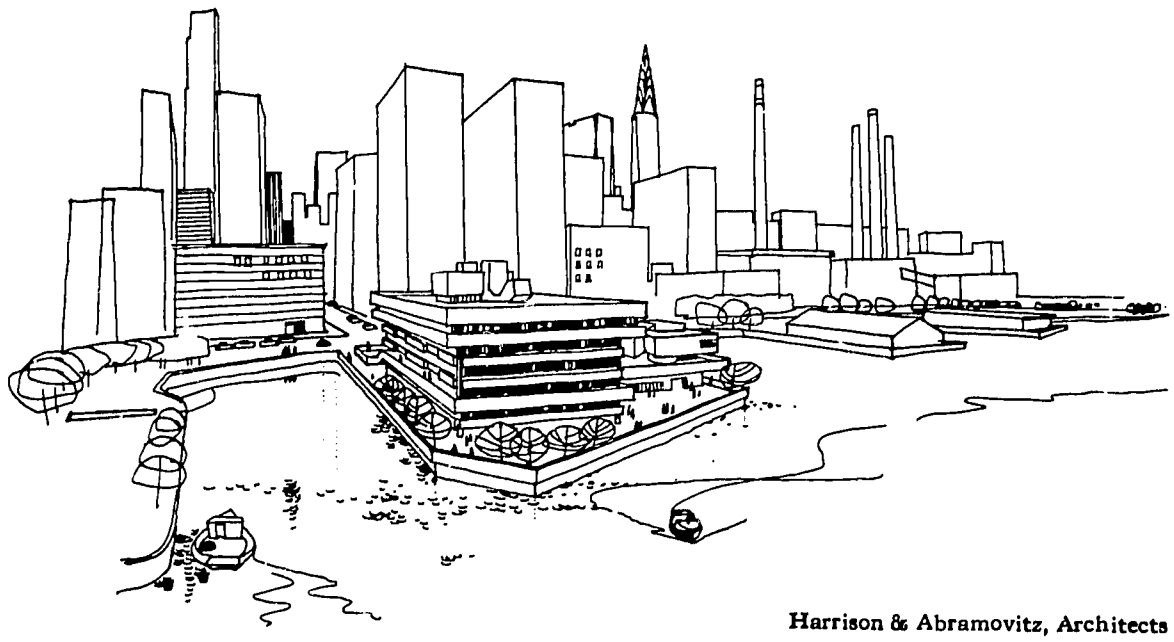
of school enrollments. If enrollments fall off, properly designed school space can be converted to apartment or office use, or vice versa.

## LAND IN THE AIR

Another application of the air rights principle involves the construction of schools over railroad yards, highways, and, in at least one case, over water. The campus of New York City's Bronx Community College already straddles a subway car yard. The public school system will build a two-school complex over a subway storage yard on Manhattan's upper West Side, and a similar project is planned for the New York Central Railroad's Morrisania yards in the Bronx. The City's new Northeast Bronx High School will straddle the Hutchinson River Parkway. Similar projects have been proposed in Minneapolis and a number of other cities. And, again in New York, the new United Nations School will be built on a renovated pier on the East River, not far from U.N. headquarters.

Air rights involve difficult engineering problems. Long-span structures usually must be erected over railroad and highway rights-of-way to support the school building or buildings. And noise and vibration from railroad or highway traffic must be isolated from the school complex. Costs tend to be higher than those for construction on conventional sites, but the difference usually is outweighed by savings in site acquisition costs and by keeping revenue-producing real estate on the tax rolls.

Similar economies are involved in a recent decision by the New York City Board of Education to fill in 40 acres of Jamaica Bay to create a site for a new South Queens High School. School construction officials estimate "tremen-



Harrison & Abramovitz, Architects

dous savings" over the cost of purchasing or condemning a conventional site in the area, relocating residents, and clearing the site.

### CONVERSION

The cities have an often untapped resource in existing commercial and industrial buildings that can be purchased and renovated for school use at costs substantially below those for acquiring a site, demolishing existing buildings, and erecting a new school.

In Cleveland, for example, an abandoned warehouse in the heart of an urban renewal area has been taken over and converted for temporary use as a supplementary education center until a permanent center can be erected. The center, financed under Title III of the Elementary and Secondary Education Act, will offer programs in science and area history to pupils who will be bussed in from all of the City's elementary schools. Furnishings and equipment for the center, designed with assistance from EFL, will be movable and usable in the new center when it is completed.

Chicago has made even wider use of renovated buildings. A former grocery-chain warehouse has been converted into a vocational high school at a cost of $1.65 million or only $6.50 per square foot. A number of abandoned telephone exchanges have been converted into "vocational educational guidance centers" for overaged elementary school pupils. The warehouse and the exchanges were donated to the school system by their former owners.

A vocational high school to be established under the Vocational Education

Act of 1963 will be built into a Chicago factory building. And an office building has been acquired for conversion into an elementary school.

Elsewhere, the cities have erected schools on conventional sites but sought ways to provide outdoor play space without using costly real estate. Both New York and New Orleans have placed new schools on stilts, leaving the area underneath as a covered playground. Elsewhere, the schools are contemplating or experimenting with the use of artificial turf, developed by industry with encouragement from EFL, to create usable and attractive play space on rooftops.

And Pittsburgh, for one, is attempting to employ unusual school sites that, because of their terrain, are either undeveloped or cheaper to acquire than is normal in a city. A planned new 5-story elementary school in Pittsburgh will be built into the side of a steep grade. As a result, the third floor will be at street level on one side of the building, high in the air on the other.

### THE PERIPATETIC PUPIL

Population shifts have become a particularly agonizing problem for city school planners. It is not unusual for city schools to have a turnover of more than half their student body in one school year. More serious to the planner, it is not unusual for a new school to be overcrowded the day it opens because of a sudden influx of population into a neighborhood. Conversely, the same shift of population often will strip another school, perhaps only 5 to 10 years old, of a large portion of its enrollment.

The result is the painful phenomenon of overcrowded and underutilized schools coexisting in the same city. Distances prevent a redrawing of school boundaries to redress the balance. And, in many cases, distances are too great or traffic too heavy to bus children to fill empty classrooms at reasonable cost to the taxpayers and reasonable travel time for young pupils.

These drastic population shifts generally are caused by the creation of new housing projects, commercial or industrial developments that displace existing housing, and, perhaps most often, massive urban renewal projects that displace thousands of families. In terms of the lead time required in school planning and certainly in terms of the life-span of a school, these developments often occur suddenly, leaving the school planner helpless to offset them.

### AND PERIPATETIC SCHOOLROOMS

Cities across the country have found one obvious solution to the quandary: temporary or relocatable classrooms. Chicago, for example, was able to

eliminate double sessions and overcrowding in large part through the use of relocatable space. Los Angeles went so far as to conclude that, in the future, 25 per cent of its new school space would be relocatable in nature. And relocatables have been erected in virtually every other major city in the country, including New York. But the solution is not without serious drawbacks. Temporary space tends not to be so temporary: Miami has a number of World War II vintage temporaries still in use.

However, because they are regarded as temporary, such buildings tend to be slighted in maintenance budgets, to deteriorate, and to become ugly and sometimes hazardous blots on the educational and urban landscape. Most relocatable buildings tend to be ugly even when new. Whether they be portable, mobile, divisible, or demountable, and whether they are made of wood, metal, or other materials, they tend to sit like so many oversized shoe boxes, trailer-camp fashion, in a school yard. From the educational standpoint, most portables are not well adapted to new educational programs, such as team teaching and ungraded instruction, that are beginning to be introduced in the city schools. And there is the added problem that, unless properly planned, relocatables may not be economically relocatable. Often the cost of moving them has been far more than expected.

Projects in Chicago; Newark, Ohio; Pittsburgh; and Minneapolis, assisted by EFL, have helped to upgrade the relocatable classroom in both appearance and function.[2] But further development work by industry in cooperation with educators is required before truly satisfactory "surge space" will be available to house shifting city school populations.

## REORGANIZING THE SCHOOLS

Since the 1920's, big city school systems have tended to be organized around the neighborhood school concept and a grade structure of 6 years of elementary school, 3 of junior high, and 3 of high school (although a number never fully departed from the old structure of 8 years of elementary and 4 years of high school).

Recent pressures on the schools, particularly pressures for integration, have resulted in challenges to both the neighborhood school and the 6-3-3 organization. The emergence of the "middle school" as a replacement for the junior high school offers a case in point. As adopted or proposed in a number of cities, the middle school would include grades 5 through 8 or 6 through 8 rather than grades 6 through 9 as in the traditional junior high school.

There are educational justifications for this move toward a 4-4-4 school organization. Its proponents argue that, properly organized, the middle

school will depart from some of the characteristics of the junior high school that have contributed to "'early sophistication [among its pupils] and its undesirable by-products.'"[3] Perhaps more important, the new organization would result in a return to a four-year high school program, which many educators hold to be superior to the three-year program, particularly for the teaching of foreign languages, mathematics, and science.

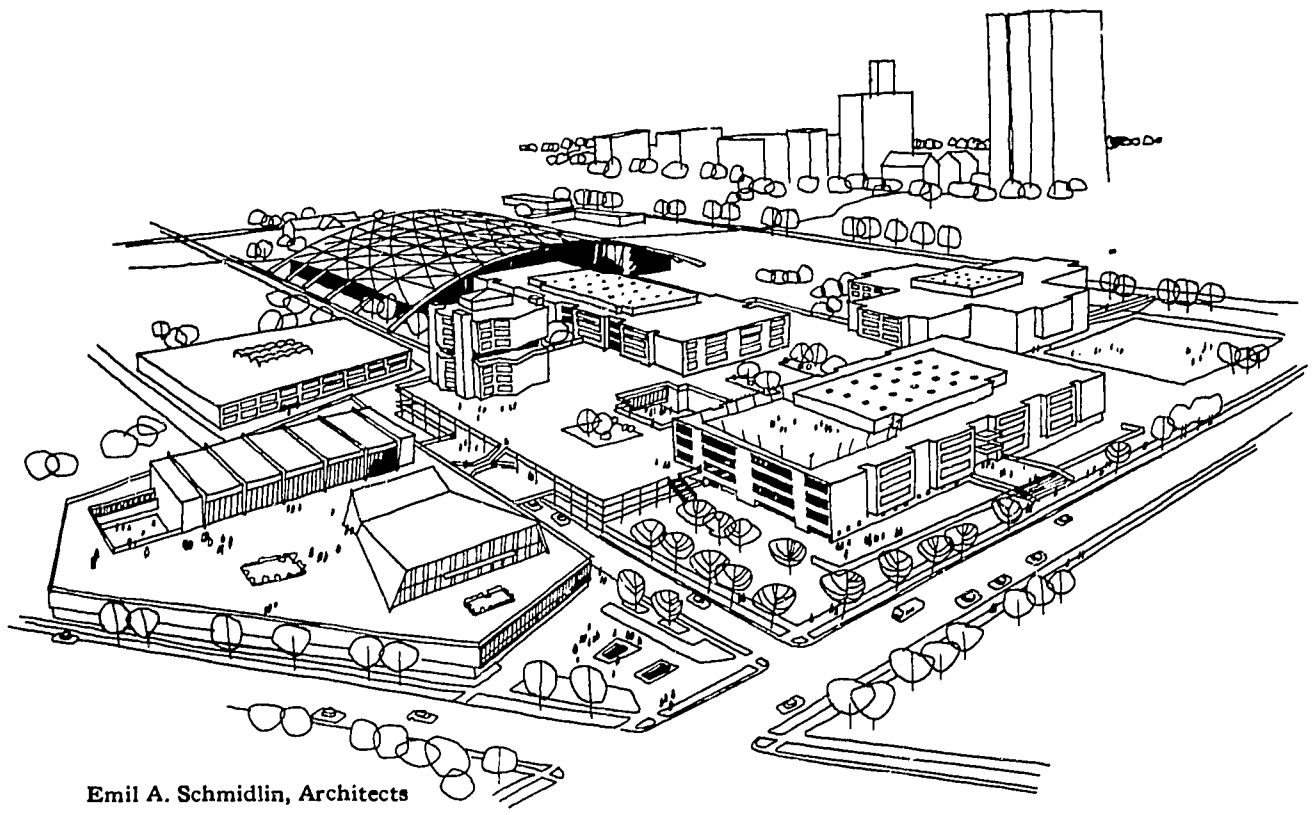
However, in the cities, the real force behind the emergence of the middle school is the drive to eliminate *de facto* segregation. The 4-4-4 or 5-3-4 school organization, premised on the middle school, offers itself to embattled school administrators as a hopeful compromise between arguments for the neighborhood school and arguments for total school integration involving abandonment of the neighborhood school. Under these patterns, the largely segregated neighborhood school remains, but only for the youngest children. They would move on to middle schools, serving a larger and potentially more racially balanced area, a year or two sooner than under the old organization. And they would move up to the high school, characteristically the best-integrated part of the system, a year earlier.

New Haven has committed itself to a 4-4-4 school organization. New York is moving to a 5-3-4 pattern that eventually may become 4-4-4. And Pittsburgh has been working on a plan to convert its system to a 5-3-4 pattern over a 10-year period. Similar plans are in various stages of discussion or action in other cities. In every case, however, the educators and planners stress that the middle school is more than a tool to foster integration. Reorganization, they argue, will accomplish little if it is not tied to an improved educational program that comes to grips with the needs of the cities' population, both culturally deprived and middle-class, so successfully that it will help to hold middle-class families in the city.

The middle school, therefore, is emerging as more than a new organization. It must be a school that will accommodate and foster new and innovative educational programs. New York, Pittsburgh, and New Haven, the first two with EFL assistance, are studying the implications of this for the middle school buildings. Out of their efforts there should emerge some guidelines for other cities contemplating construction of this new building type.

### THE EDUCATION PARK

A more direct challenge to the neighborhood school is posed by widespread proposals that the cities create educational parks. The educational park concept means different things to different cities, but usually calls for the construction of clusters of schools of all levels from elementary up through high



Emil A. Schmidlin, Architects

school and perhaps even through a community college, on a single, parklike site. In the process, segregated, neighborhood schools would be abandoned.

The most dramatic example is East Orange, New Jersey, which has laid plans to abandon its existing—and obsolete—school system and recreate it in an educational park. Planning for the new complex has been started, with support from EFL to help resolve some of the design questions involved. But East Orange is a small, geographically compact community. Travel distances from any part of the city to the educational park will not be excessive.

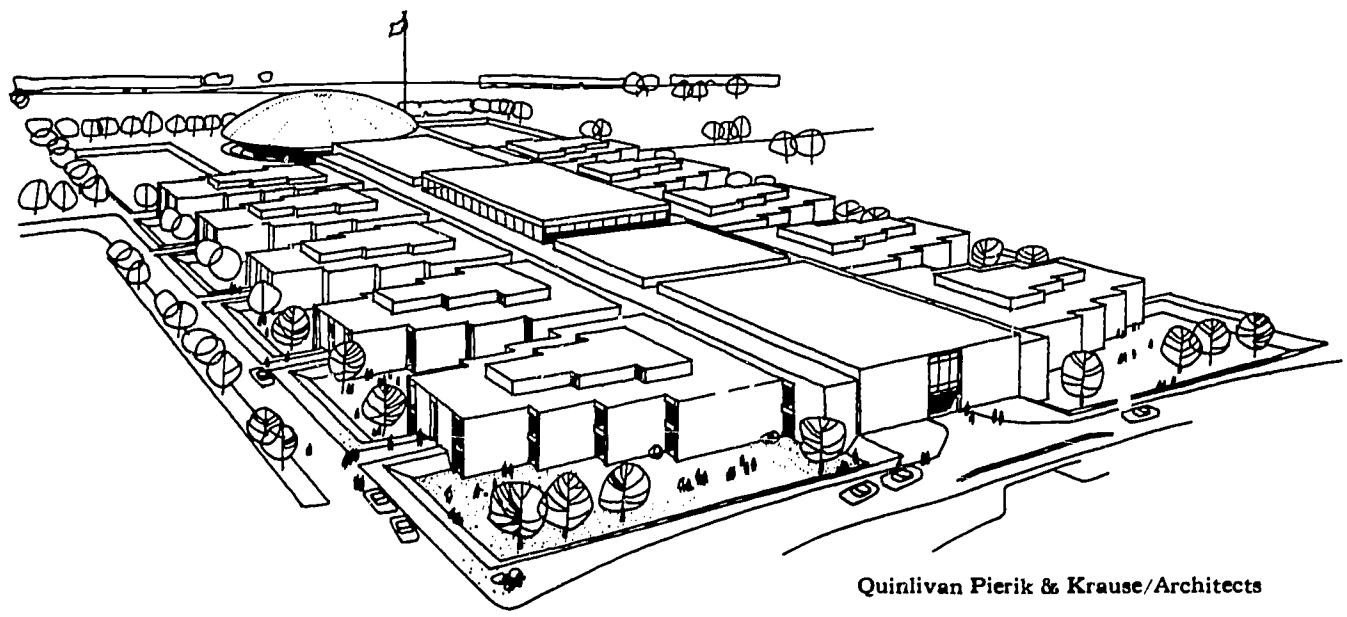
Probably more significant for the immediate future in the big cities is the approach being taken by New York. One of two educational parks planned by the City will straddle the boundary between the Boroughs of Manhattan and the Bronx. Called the John F. Kennedy Educational Park, the new complex will include a high school for 4,000 pupils and a combination intermediate and elementary school housing 2,000 pupils. A third school is under consideration, either for intermediate or elementary grades. Because of its location and access to public transportation, the park will draw pupils both from the predominantly white northwest Bronx and the heavily Negro and Puerto Rican areas of northern Manhattan. School officials predict that the enrollments of the high school and combination intermediate-elementary school will be 40 per cent Negro and Puerto Rican and 60 per cent white and

"others." The plan does not involve the abandonment of any existing neighborhood elementary school but will mean better integration at the intermediate and senior high school levels.

The JFK center displays more than just the educational park concept. It, probably more than any other school in the country, will typify urban school building problems, e.g. the 2,000- by 300-foot site was formerly the bed of the Harlem River; a wing of the school will straddle a spur of the New York Central Railroad; and, because of the odd site, the western entrance of the complex will be at the fourth floor; the eastern entrance, at the ground floor but several flights of stairs below a passing roadway. School officials must build their own service road and street.

The second park, planned for the new Co-op City middle-income housing development in the northeast Bronx, will have a broader impact on school attendance patterns. As planned, the $30 million school complex will include one senior high school, two intermediate schools, and three to five elementary schools, accommodating a total of about 10,000 pupils. Of the total, some 4,000 pupils of all grade levels will be drawn from outside the housing project, with the result that the school complex is expected to be well integrated.

Whether the Co-op City Educational Park consists of six to eight low-rise buildings blended into the 25-acre site or one high-rise structure blending with the 20- to 40-story adjacent apartment buildings, officials hope to retain intimacy for the pupils by organizing the complex as groups, schools within schools.



Quinlivan Pierik & Krause/Architects

Syracuse, New York, plans the more drastic step of using an educational park plan to phase out its existing system of neighborhood elementary schools. It may take 15 years or more, but eventually all Syracuse public school pupils from nursery age through the sixth grade will attend school in four large educational parks.

As planned, each park will contain five classroom buildings, accommodating 900 pupils in each of the buildings, and a central or core building. The latter will house library and audio-visual services, auditorium, cafeteria, art and music studios, a school health center, and facilities for special education and guidance. There are tentative plans to install computers for use in the instructional program. Because it costs less to construct one core facility for a large park than limited auxiliary facilities in a series of traditional elementary schools, school authorities predict that the educational park project will cost less than continued construction of neighborhood schools.

The plan involves, in some instances, complete revision of the educational program. The parks will be nongraded so that the individual pupil will move through the curriculum at his own best pace and will not be tied to the progress of a traditional class of 30 pupils or so. More teachers will work in teams, each teacher covering the subject matter in which he is most competent and all teachers free to spend more time with individual pupils and small groups. Both team teaching and nongraded programs are under way on an experimental basis in Syracuse's existing elementary schools.

With their new facilities and programs, school officials hope the educational parks will achieve a stature that will appeal to parents in order to slow or stop the exodus of middle-class families to the suburbs and help attract some suburbanites back to the City.

That possibility may be enhanced by the projected location of the parks in more agreeable and economical open space near the periphery of the City rather than in congested, downtown locations.

(Such an arrangement could have import for cities hoping to cross political boundaries and set up pupil exchanges between suburban and city school systems. Such exchanges have been proposed for Chicago and Boston. Rochester has tried it for two years with three suburban school systems involved at one time or another. About 100 Rochester pupils will attend suburban schools this winter and next summer. Most advanced, however, is a program in Hartford where five suburbs tentatively have agreed to accept 265 inner-City elementary pupils this fall and where one suburb, West Hartford, already has had 200 Hartford elementary pupils in an eight-week summer school.)

An entirely different interpretation has been placed on the term educational park by the Pittsburgh school system. Rather than creating school complexes in which all levels of education occur on one site, Pittsburgh envisions the educational park as part of an over-all redevelopment scheme for entire city neighborhoods.

The concept was developed by the Pittsburgh school staff with David Lewis, a British urban planner on the faculty at the Carnegie Institute of Technology. It indeed calls for large, parklike complexes, each of which will include a high school for 5,000 students; a technical institute; community cultural, social, and recreational facilities; and perhaps even commercial facilities such as shopping centers and movie theaters. But, in contrast to other park concepts, the rest of the school system will be scattered through the surrounding neighborhoods along major greenbelts (for both vehicles and pedestrians) and minor greenbelts (for pedestrians only) that will connect the neighborhoods to the park.

Small neighborhood pre-primary school/day-care centers for 100 children will be located along the minor greenbelts, created by closing residential streets and using the area's extensive back-alley system for service and vehicular access. In many cases these small sub-neighborhood units will be built into rehabilitated structures that once were town houses but have degenerated into slum or marginal housing. Sited further along the greenbelts and closer to the parks, will be neighborhood elementary schools for about 450 pupils each. And still closer will be middle schools for 950 pupils. The schools at all levels will contain facilities for community services. Even the pre-primary units may be linked to such facilities as health clinics and neighborhood senior citizens' centers.

In developing its park concept and overhauling the rest of the school system, Pittsburgh plans to replace its existing 23 high schools with 4 to 6 large high schools, most or all located in the new park complexes. Of the existing high schools, only those that are obsolete will be scrapped. The rest will be converted into middle schools for grades 6-8, or possibly 5-8.

## HOUSING THE NEW PROGRAMS

Syracuse's stress on team teaching and non-graded programs represents only one of the new educational programs that have been or will be developed to meet the special needs of urban children and that will require new building designs. Philadelphia, for example, plans a different approach to the supplementary education center. The city school system is planning to build a science center to serve nearly two million school children in the Philadelphia area. The Joseph Priestley Science Center, planned with EFL assistance, will

be devoted to improved science instruction for both average and talented students.

A number of cities have tackled the physical problems of housing educational programs—such as the Office of Economic Opportunity's Head Start program—for preschool children. Pittsburgh, as has been noted, plans combined preschool and day-care centers in renovated housing. Perhaps more intriguing, Miami proposes to reduce overcrowding in its downtown schools as part of its program to create preschool facilities. Under the Miami program, grades one and two will be eliminated in the elementary schools and transferred to new neighborhood schools also accommodating the 4- and 5-year-olds. The first of the new neighborhood prototype units opened in portable buildings, but school officials hope eventually to develop permanent facilities tailored to the new program.

And, as a parallel to New York's effort to develop a prototype for the urban middle or intermediate school, New Haven has what may serve as a prototype for urban high schools responsive to the wide range of abilities and needs of urban students. Designed by Saarinen Associates, the $4.3 million Hill High School for the first time combines two basic innovations in school design: the house plan, in which the building is designed to accommodate a large student body but in smaller, more intimate "houses" or schools within a school, and the loft plan, in which long, open spans of building area permit easy rearrangement of partitions to accommodate changes in program.

The 1,600-student school consists of a two-story academic building and a physical education building, including gymnasiums and a swimming pool. The upper story of the academic wing contains four equal-sized "houses," one each for grades 9 through 12, grouped around a central library resource area. Students cannot move from one house to another without passing through and, hopefully, being enticed by the large library and its collection of books and other learning materials. The lower floor houses a divisible auditorium which converts into four 200-seat lecture halls, as well as shops, laboratories, kitchen and cafeteria, business education classrooms, and a health suite.

Hill High's house plan comes to grips with the problems of massiveness and impersonality found in most urban high schools. And its loft plan insures adaptability of the building to changes in program as New Haven's educators seek new and better ways to meet the needs of their students. It may well represent the city schoolhouse of the future.

### THE SCHOOL AND THE COMMUNITY

Traditionally, the American schoolhouse has been a part-time establishment, operating during school hours, shut tight at night, on weekends, and over the

summer months, and serving only its regularly enrolled pupils. The past several decades have brought about some changes in this pattern. Summer school and recreational programs, community recreation centers, and adult education and literacy programs have been set up in school buildings in many communities across the nation. In Flint, Michigan, a leader in this development, classroom lights burn far into the night to accommodate a "community school" program supported by the Mott Foundation.

Flint's program is largely oriented toward recreation and adult education. It has had an important by-product in that it tends to involve entire families in the life of the school. The term "community school" is taking on a new and much broader meaning.

New city schools are being planned so that such facilities as the library, the auditorium, gymnasiums, and cafeterias are accessible for community use. In Chicago, for example, a new wing to the South Shore High School will be "floated" over gymnasium and theater facilities designed for both school and community use. The school's library, which will have three times the space of any existing Chicago public school library, will double in brass as the branch public library. In Cleveland, self-contained satellite buildings are being added to existing schools to accommodate community as well as school activities. The $125,000 units, electrically heated, include a community room, kitchen, rest room facilities, a library, and a combined gymnasium-theater-meeting room.

But perhaps nowhere has the community school concept taken on greater meaning than in New Haven. Some years ago, an enlightened city administration concluded that New Haven's ambitious urban renewal program could not succeed unless it was linked to an equally ambitious program of human renewal. It was not enough to raze or rehabilitate blighted neighborhoods and replace them with new commercial or residential developments. Families had to be relocated, jobs had to be found for the unemployed and, often, the unemployed had to be recruited to fill them. Where necessary, the unemployable had to be retrained, even reeducated. And other human problems, such as health, mental health, and family relations, had to be tackled before many of the City's residents could become productive citizens.

The City had its existing social and welfare departments, and community action and urban renewal agencies to deal with these problems. But it soon became apparent that the schools, while they could not be asked to take responsibility for the human renewal programs, could and should play a central role. The schools, New Haven's planners concluded, would become the focal point of the revitalized neighborhoods emerging from the urban renewal effort.

And, as it turned out, the schools became the fiscal lever in the City's urban renewal program. Acting on a school survey by Dr. Cyril G. Sargent, the City approved a construction program for 15 new schools and floated a $17.6 million bond issue to finance them. Eleven of the new schools are in urban renewal areas. Their construction cost, estimated at the time at $9.3 million, would be matched by the State. The federal government, in turn, will match the State and local investment on a two-to-one basis, for a total of $37.2 million. In other words, for a $9.3 million investment in its new schools, New Haven stands to receive $46.5 million in State and federal funds to carry on its drive to become "the first slum-free city in America."[4]

The Sargent report, however, called not just for new schools but for a total reorganization of the system that would integrate the schools with the City's urban renewal and neighborhood improvement programs. The new schools would be sprinkled through the City to serve neighborhood areas and would include community facilities. In addition, they would serve a new grade structure. The old organization of six-year elementary schools, three-year junior high schools, and three-year senior high schools—the K-6-3-3 pattern—was replaced in the plan by a system of four-year elementary, four-year middle, and four-year high schools—a K-4-4-4 system.

While New Haven's program of school construction and renovation provides for community use of all facilities, the middle schools will be the key to the community school program. In all, there will be 10 such schools, 3 of them new, 4 in renovated junior high schools, 2 in renovated and enlarged elementary schools, and 1 in the newly built Conte School, which now houses Kindergarten through Grade 6.

Conte, designed by Skidmore, Owings and Merrill, was a prototype for the New Haven concept of community school as well as a key element in the rehabilitation of the City's Wooster Square neighborhood. The campus-plan school plant includes separate structures housing a senior citizens' center, a combined school and public library, and a small theater/auditorium. Neighborhood offices of Community Progress, Inc., New Haven's community action agency, are located in the senior citizens' center, and other neighborhood services could be accommodated there. The schools' health suite, located in the main building, serves both the community and the student body. It is manned by two public health nurses, who alternate between work in the neighborhood and work with pupils. And it has two entrances, one opening into the school, the other into the outdoors and thus into the community. Finally, the school's swimming pool, designed for instructional and recreational purposes, serves pupils from throughout the City during the day and adults in the evening.

At Conte, and at six other community schools now in operation, a wide range of other community services—including employment, social and psychiatric help, and legal aid—are offered but housed separately from the school in rented storefronts or office space. New Haven's concept is that community services should not be fragmented but centralized in one place, centered around the school. Responsibility for the various services remains with the appropriate municipal and community agencies, but a central physical location and coordination—through an assistant principal or school-community coordinator—are provided by the school. It has not been determined whether all community services actually will be housed in the middle schools still to be built. But whether or not they are, the community school has come of age in New Haven.

## NEW LIFE FOR OLD SCHOOLS

Not every American city will be in a position to undertake vast construction programs to create new schools to meet the new challenges of urban education. Very few will attempt to replace their entire school plant as East Orange is doing. Most will have to live with buildings of relatively recent vintage (and some of not-so-recent vintage) too valuable to discard but inadequate for the new educational programs they must house.

Recognizing that fact, EFL in 1964 inaugurated a self-administered project aimed at developing improved approaches to the modernization of outmoded urban school plants. The project, conducted in cooperation with the Research Council of the Great Cities Program for School Improvement, so far has sponsored an airborne tour of school renovation projects in four states and Canada, sponsored a series of conferences to explore creative solutions to the problem, and held an architectural design competition for the renovation of Chicago's Hyde Park High School.

The winning design, developed by Orput-Orput and Associates of Rockford, Illinois, reflects the project's objectives. The remodeled school will accommodate the latest teaching techniques and electronic teaching aids. At the same time, the remodeled structure will be easily adaptable to future changes in educational program. The heart of the redesigned school will be a resource and independent study center twice as large as the present library. And the school's little-used auditorium will be converted to include two large-group teaching spaces equipped with the latest audio-visual devices.

A conference report, *New Life For Old Schools,* has been published, and a film bearing the same title is in preparation. A newsletter reporting on project developments is mailed periodically to more than 1,200 educators

and architects. And a report on the Hyde Park High School design competition is to be published later this year.

Future projects include a design study in Pittsburgh in cooperation with the Department of Architecture, Carnegie Institute of Technology, for the development of two prototype renovation schemes, one for an old school in a stable city neighborhood, the other for a school in a redevelopment neighborhood. The idea is to turn attention to solutions of how to change the exterior of the building to reflect more appropriately the character of the neighborhood it serves. Another design competition is tentatively scheduled for New York and two other large cities in 1967. And a special project group has been formed to encourage industry to develop new building products suitable to renovation projects.

### THE URBAN SCHOOLHOUSE

The schoolhouse in the city cannot by itself become the dominant element in urban social planning. But the schools, as reflected by the buildings in which they operate, can be a magnet to hold or attract those who have the choice. Or, they can speed the exodus and compound the urban social issues with which the nation is grappling.

1. See *The Things of Education: A Second Report from Educational Facilities Laboratories.*
2. See EFL's *Relocatable School Facilities.*
3. See EFL's *Profiles of Significant Schools: Middle Schools.*
4. See EFL's report, *The Schools and Urban Renewal: A Case Study from New Haven.*

## *OTHER REPORTS FROM EFL*

*The following publications are available without charge from the offices of* EFL: *477 Madison Avenue, New York, New York 10022.*

*BRICKS AND MORTARBOARDS.* A guide for the decision-makers in higher education: how the colleges and universities can provide enough space for the burgeoning enrollments of this decade; how the space can be made adaptable to the inevitable changes in the educational process in the decades ahead. (One copy available without charge. Additional copies $1.00.)

*COLLEGE STUDENTS LIVE HERE.* A report on the what, why, and how of college housing; reviews the factors involved in planning, building, and financing student residences.

*THE COST OF A SCHOOLHOUSE.* A review of the factors contributing to the cost and effectiveness of schoolhousing, including planning, building, and financing.

*DESIGN FOR ETV—PLANNING FOR SCHOOLS WITH TELEVISION.* A report on facilities, present and future, needed to accommodate instructional television and other new educational programs. Prepared for EFL by Dave Chapman, Inc., Industrial Design.

*RELOCATABLE SCHOOL FACILITIES.* A survey of portable, demountable, mobile, and divisible schoolhousing in use in the United States and a plan for the future.

*SCHOOL SCHEDULING BY COMPUTER/THE STORY OF GASP.* A report of the computer program developed by MIT to help colleges and high schools construct their complex master schedules.

*SCSD: THE PROJECT AND THE SCHOOLS.* A second report on the project to develop a school building system for a consortium of 13 California school districts.

*THE SCHOOL LIBRARY.* A report on facilities for independent study, with standards for the size of collections, seating capacity, and the nature of materials to be incorporated.

*TO BUILD OR NOT TO BUILD.* A study of the utilization of instructional space in small liberal arts colleges, with a do-it-yourself workbook for the individual use of the institutions that wish to survey their own utilization levels.

PROFILES OF SIGNIFICANT SCHOOLS

A series of reports which provide information on some of the latest developments in school planning and design.

*Holland High School,* Holland, Michigan

*High Schools 1962*—educational change and architectural consequence

*Schools Without Walls*—open space and how it works

*Middle Schools*—controversy and experiment

## *OTHER REPORTS FROM EFL*

CASE STUDIES OF EDUCATIONAL FACILITIES

A series of reports which provide information on specific solutions to problems in school planning, design, and construction.

6. *A College Health Center.* Case study of a model center for small private colleges; architectural design by Caudill, Rowlett & Scott.

7. *New Building on Campus: Six Designs for a College Communications Center.* Graphic representations of the results of an architectural competition for a new space to house the accouterments of instructional aids and media.

8. *The Schools and Urban Renewal.* A case study of the Wooster Square renewal project in New Haven, Connecticut.

9. *Air Structures for School Sports.* A study of air-supported shelters as housing for playfields, swimming pools, and other physical education activities.

10. *The New Campus in Britain: Ideas of Consequence for The United States.* Recent British experience in university planning and its implications for American educators, architects, and planners.

11. *Divisible Auditoriums.* Operable walls convert little-used auditoriums and theaters into multipurpose, highly utilized space for the performing arts and instruction.

12. *The High School Auditorium: Six Designs for Renewal.* Renovation of little used auditoriums in old and middle-aged schools to accommodate contemporary educational, dramatic, and music programs.

TECHNICAL REPORTS

1. *Acoustical Environment of School Buildings* by John Lyon Reid and Dariel Fitzroy—Acoustics of academic space in schools. An analysis of the statistical data gathered from measurement and study.

2. *Total Energy.* On-site electric power generation for schools and colleges, employing a single energy source to provide light, heat, air conditioning, and hot water.

COLLEGE NEWSLETTER

A periodical on design questions for colleges and universities.